SPECIAL AIRWORTHINESS INFORMATION BULLETIN





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Introduction

This Special Airworthiness Information Bulletin (SAIB) alerts you, an owner or operator of certain light planes, of problems with **fuel system gascolators**.

Background

A **gascolator**, like a modern fuel strainer, contains a fuel filter screen and a sediment bowl that also serves as a water separator. The term *gascolator* is generally applied to those units employing a *wire bail* to hold a removable glass or metal bowl in place. A number of aircraft have made forced landings due to problems involving fuel system gascolators. The forced landings were due to power loss caused by fuel flow interruption and involved three types of malfunctions:

1. Separation of the gascolator bowl from the aircraft in flight.

There have been at least three occurrences of this type in the last eight years. If the bowl departs the airplane, a major fuel leak occurs and the engine is deprived of fuel. Generally, the pilot may not be aware of the fuel leak, which could become an additional hazard during the ensuing forced landing.

2. Gascolator leak or loose gascolator bowl.

We have recorded instances in which the bowl was loose due to improper gaskets or bail wires. If the aircraft has a gravity type fuel system, a fuel leak will be noticed. The fuel leak could affect the aircraft's duration of flight or the engine operation. In addition, if the aircraft employs an engine fuel pump, air could be sucked into the fuel system and adversely affect the engine operation.

3. Gascolator drain valve.

Some gascolators employ quick drain valves to allow the pilot to drain the bowl during the preflight. Quick drain valves have been known to develop leaks or even dislodge during flight.

Recommendation

We recommend that prior to each flight and after every maintenance action involving the gascolator, **you pay close attention to the security of the gascolator bowl assembly**. You should look for signs of leaks, check the security of the safety wire, and physically determine that the bowl is tight in the assembly.

For Further Information Contact

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